IN THE CLAIMS

Please amend the claims as follows:

Claim 1-19 (canceled).

Claim 20 (currently amended): An information recording method using an information medium ~~which has a data area for recording stream data using data packets and data units, each of the data units being larger than the data packets, and a management area for recording management information, a data structure to be stored on said information medium including: a stream object, formed of the stream data, including at least one first data unit, at least one second data unit having the at least one first data unit, and~~ at least one third data unit ~~having the at least one second data unit, the at least one third data unit storing header information relating to the at least one first data unit in the at least one third data unit~~ for recording stream data of MPEG-TS in accordance with a data structure using transport stream packets and data units, the information medium including:

a data area for recording object data of the stream data using the transport stream packets, one of the data units being larger than one of the transport stream packets, and

a management area for recording management information of the object data, wherein,

the data structure organizes the object data as one or more of the data units included in the stream data, each one of the data units including the transport stream packets and information indicating an arrival time of a first packet of one of the data units,

said method comprising:

~~constituting the stream data by one or more of the data units;~~

~~constituting each of the data units by one or more of the data packets, at least one of the data packets having predetermined time stamp information;~~

~~constituting the management information including information indicating an arrival~~

~~time of a first packet of one of the data units; and~~

~~recording the stream data in the data area and the management information in the~~

~~management area of the information medium~~

receiving the stream data; and

recording the received stream data on the information medium in accordance with the

data structure.

Claim 21 (previously presented): A method according to Claim 20, further

comprising:

recording, in the management area, at least a time difference value corresponding to a

difference between a first time stamp recorded in a first data unit and a second time stamp

recorded in a second data unit, said first and second data units being included in the plurality

of said data units.

Claim 22 (previously presented): A method according to Claim 21, further

comprising:

determining the time difference value by rounding to a predetermined number of

effective digits a difference between a time information value corresponding to the second

time stamp and a time information value corresponding to the first time stamp.

Claim 23 (previously presented): A method according to Claim 21, further

comprising:

computing the time difference value using a value of the first time stamp recorded in a

first one of the data packets located in each of the data units.

Claim 24 (previously presented): A method according to claim 21, further

comprising:

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recording a time stamp in one of the data packets at an end of a last one of the data

units included in the stream data indicating an arrival time of a last one of the data packets in

the last one of the data units; and

computing the time difference value using the arrival time of the last one of the data

packets.

Claim 25 (currently amended): ~~A~~ An information medium ~~containing data structures~~

for recording stream data of MPEG-TS in accordance with a data structure using ~~data~~

transport stream packets and data units, comprising:

a data area for recording object data of the stream data using the transport stream

packets, one of the data units being larger than one of the transport stream packets; and

a management area for recording management information of the object data,

wherein,

~~a data structure stored in said memory including,~~

the data structure organizes the object data as one or more of the data units included in

the stream data, each one of the data units including ~~one or more data~~ the transport stream

packets ~~configured to record time stamp information,~~ and ~~management information including~~

information indicating an arrival time of a first packet of one of the data units~~, wherein,~~

~~said information medium has a data area for recording the stream data using the one~~

~~or more data packets, one of the data units being larger than the one or more data packets, and~~

~~a management area for recording management information , and~~

~~said data structure includes a stream object formed of the stream data, including at~~

~~least one first data unit, at least one second data unit having the at least one first data unit, and~~

~~at least one third data unit having the at least one second data unit.~~

Claim 26 (previously presented): A memory according to claim 25, wherein a time

difference value corresponding to a difference between a first time stamp recorded in a first

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data unit and a second time stamp recorded in a second data unit is recorded in the management area, said first and second data units being included in said plurality of data units.

Claim 27 (previously presented): A memory according to claim 26, wherein the time difference value is determined by rounding to a predetermined number of effective digits a difference between a time information value corresponding to the second time stamp and a time information value corresponding to the first time stamp.

Claim 28 (previously presented): A memory according to claim 26, wherein a value of the first time stamp recorded in a first one of the one or more data packets in the first data unit is used to compute the time difference value.

Claim 29 (previously presented): A memory according to claim 26, wherein a time stamp recorded in one of the one or more data packets at an end of a last one of the plurality of data units included in the stream data indicates an arrival time of a last one of the one or more data packets in the last one of the plurality of data units, and the arrival time of the last one of the one or more data packets is used to compute the time difference value.

Claim 30 (currently amended): An information recording apparatus using an information medium ~~which has a data area for recording stream data using data packets and data units, each of the data units being larger than the data packets, and a management area for recording management information, a data structure stored on said information medium including,~~

~~a stream object, formed of the stream data, including at least one first data unit, at least one second data unit having the at least one first data unit, and at least one third data unit having the at least one second data unit, the at least one third data unit storing header information relating to the at least one first data unit in the at least one third data unit~~ for

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recording stream data of MPEG-TS in accordance with a data structure using transport stream

packets and data units, the information medium including:

a data area for recording object data of the stream data using the transport stream

packets, one of the data units being larger than one of the transport stream packets, and

a management area for recording management information of the object data,

wherein,

the data structure organizes the object data as one or more of the data units included in

the stream data, each one of the data units including the transport stream packets and

information indicating an arrival time of a first packet of one of the data units,

said apparatus comprising:

a receiver block configured to receive the stream data ~~with said data structure~~; and

a recorder block configured to record the stream data[[,]] received by said receiver

block[[,]] on the information medium in accordance to the data structure.

Claim 31 (currently amended): An information reproducing apparatus using an

information medium ~~which has a data area for recording stream data using data packets and~~

~~data unit, each of the data units being larger than the data packets, and a management area for~~

~~recording management information, a data structure stored on said information medium~~

~~including,~~

~~a stream object, formed of the stream data, including at least one first data unit, at~~

~~least one second data unit having the at least one first data unit, and at least one third data unit~~

~~having the at least one second data unit, the at least one third data unit storing header~~

~~information relating to the at least one first data unit in the at least one third data unit~~ for

recording stream data of MPEG-TS in accordance with a data structure using transport stream

packets and data units, the information medium including:

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a data area for recording object data of the stream data using the transport stream

packets, one of the data units being larger than one of the transport stream packets, and

a management area for recording management information of the object data,

wherein,

the data structure organizes the object data as one or more of the data units included in

the stream data, each one of the data units including the transport stream packets and

information indicating an arrival time of a first packet of one of the data units,

said apparatus comprising:

a reproducer block configured to reproduce the stream data with said data structure

from the information medium; and

a decoder block configured to decode the stream data reproduced by said reproducer

block.